

Holtra Chem Chlor-Alkali Facility, Ridgewood, Columbus County, NC

POLREP #6, 01/24/03

**SITE ACTIVITIES:**

January 22, 2003

Envirotech Inc. continues with ACM abatement activity. Cell building control room is completed. Aggressive air monitoring sample results verified the successful removal of ACM. Envirotech initiates ACM removal outdoors in the MESS area utilizing glove bagging technique to remove pipe ACM insulation.

URS personnel commence pipeline breaking and dismantling activities outdoors in the brine MESS area behind the Envirotech ACM abatement process. URS personnel continue with power washing of the mercury cell units.

OSC performed intrusive activity to monitor all activities. Orange snow fence surrounding the cell building to delineate hot zone, is under construction. Contamination Reduction Zone (CRZ) temporary structure made of visqueen and wood was constructed outside the cell building. OSC noted that personnel continue to initiate decon inside the hotzone as opposed to outside in the CRZ. HASP requires that decon occur in the CRZ.

OSC received approval from NCDENR Solid Waste Section for the off-site use of Anson Waste Management Facility in Polkton, NC for disposal of ACM.

January 23, 2003

Inclement weather today (extremely cold...5 to 10 F) and heavy snow/ice make site activities cumbersome. Work continued in a slow, methodical and deliberate pace.

OSC reviewed site Emergency Action Plan (EAP). Comments were forwarded to site personnel. Additional work is needed to shore up specific roles and responsibilities of site personnel, evaluation of potential response scenarios and hazard analysis. OSC is putting together a power point presentation for 1/29/03 emergency management presentation to fire and ems personnel in the county and state.

HASP issues are still not finalized. Due to snow storm the SHSO was not on site today.

Work continued similar to yesterday's activities.

January 24, 2003

No onsite work today. Schedule for contractor activity is ten hour days, Monday thru Thursday.

Local newspaper interview was cancelled by reporter.

**FUTURE ACTIVITIES:**

OSC Geraghty to be on site week of 01/27/03.

ACM abatement activities outside on pipelines to continue. Line breaking activities to continue by URS personnel.

Emergency Management meeting for 1/29/03 at 1900hrs is still on. OSC is coordinating the efforts of Honeywell and EPA personnel for presentations.

POLREP #5, 01/16/03

SITE ACTIVITIES:

January 14, 2003

Site field work commenced. Envirotech Inc. receives safety briefing and commences asbestos abatement work within the cell building itself. URS performs minor cell building housekeeping, powerwashing activities in areas outside of the ACM removal work.

Honeywell requested updated cost information from EPA and an estimate for all future costs.

January 15, 2003

OSC on site.

Monthly All-Hands meeting. Specific items discussed included:

- removal activity/construction status: ACM removal initiated, URS performing power washing and loose mercury pickup activities, URS documents such as HASP and Work Plan require comment, OSC stipulated that these comments should be initiated by Honeywell since OSC provided comments to site HASP, site HASP still needs to be finalized,
- status of the LDR variance request: NCDENR Haz Waste Management Program is reviewing and will provide decision,
- need for Honeywell to notify OSC of potential disposal facilities so that OSC can check on off-site compliance status
- remedial and removal integration: RPM now assigned and will initiate risk assessment and remedial investigation process, formal discussions to be initiated between Honeywell and EPA towards AOC, preliminary remediation goals (prg) from Region IX to be followed for soil cleanup goal,
- Field Sampling Plan - final touches are being applied as a result of EPA/NCDENR comments, critical for RPM to review with eye towards initial proposed sampling of the retort area, FSP needs to be able to pass RPM review so that work will not need to be redone,

Emergency Management Meeting:

OSC conducted/invited State Division of Emergency Management (DEM) Area Coordinator and County Fire Marshall as well as Riegelwood Fire Chief (did not attend) for open discussion re: emergency response to fire or other type incident. Brief history

provided by facility personnel. Site Health and Safety personnel provided specific HASP briefing to guests and discussed mercury hazard analysis. It was agreed that a much larger discussion would be beneficial to Riegelwood Volunteer Fire Dept. and other departments that may be called to respond. Purpose is to prepare responders for various levels of emergencies and also to provide education regarding site specifics and hazards. This meeting to be held on 01/29/03 at Riegelwood.

Community Relations Specialist on site conducting community needs assessment and other outreach activities.

January 16, 2003

Attend morning tailgate health and safety briefing for site workers. OSC noted issues and concerns and provided written comments of such as well as additional modifications to HASP to Honeywell and SHSO. OSC then conducted meeting to resolve health and safety issues with site/contractor management. Revised HASP is to be submitted early next week.

#### FUTURE ACTIVITIES:

OSC on site week of 01/21/03.

ACM abatement activities within cell building to continue. Site preparatory activities by URS personnel to continue as well.

POLREP #4, 10/23/02

#### SITE ACTIVITIES:

- Second draft Site Decon and Demolition Plan has been submitted on 12/17/02.
- Site Health and Safety Plan (HASP) has been finalized and submitted on 12/17/02
- Prime Cleanup Contractor (URS Inc., Wayne, NJ) was contracted with to perform implementation of the AOC and subsequent approved plans.
- URS submitted their HASP and Decon and Demo Plan on 12/26/02. OSC informed Honeywell that they will be responsible for review of this document for consistency with Site HASP and Site Decon and Demo Plan.
- Enviro-Tech (sub to URS for ACM abatement) submitted its ACM Removal Work Plan to OSC on 01/09/03.
- URS mobilized equipment and personnel to subject site on 01/06/03 to commence implementation of subject documents. Initial work will involve the abatement of asbestos within the cell building. URS performed initial site intrusive activities in the cell building on 01/10/03. These activities included general housekeeping activities/loose mercury vacuuming in the cell building basement.

- Start contractor (Weston Solutions) mobilized to site on 1/6/02 to initiate site air sampling program. Baseline sampling this week will include sampling at each of the 4 predesignated locations and one duplicate. Refer to Air Sampling Plan dated 11/20/02.

**FUTURE ACTIVITIES:**

Site mobilization of EPA will occur week of Jan 06, 2003.

Regular site meeting between RP and EPA will be conducted on 01/15/03.

OSC has initiated meeting with Columbus County Emergency Services, Riegelwood Fire Department and NC DEM Area Coordinator for 01/15/03 in PM.

EPA Community Relations Specialist to initiate development of Community Relations Plan on 01/15/03.

POLREP #3, 10/23/02

**SITE ACTIVITIES:**

EPA ERRB Chief signed Administrative Order on Consent on July 01, 2002. This is the effective date of this Order.

EPA and DENR has conducted review and provided comment on site specific Health and Safety Plan (HASP), Site Work Plan, Site Decon and Dismantling Plan, Hurricane Preparedness/Stormwater Management Plan and Field Sampling Plan. The RP is presently in the process of evaluating prime contractors and their proposals for the implementation of the various plans. It is anticipated that site work will commence in early December with asbestos abatement activities as described in the Work Plan.

**FUTURE ACTIVITIES:**

Site mobilization of contractors and EPA/Start personnel will occur in early December, 2002.

POLREP #1, 03/12/02

**SITE ACTIVITIES:**

EPA and its START contractor Weston Solutions Inc. performed a site sampling event on site on April 2, 2002. A Site Sampling Letter Report from Weston Solutions is pending. Purpose of this event was to identify potential "hot spots" or areas where mercury and other hazardous substance contamination warranted time critical response and to integrate with NCDENR's site assessment.

The obvious "hot spot" is the old cell building. This area is presently included in a time critical removal Administrative Order on Consent (AOC) with Honeywell. On June 14, 2002, Honeywell representatives signed this AOC. Implementation of the AOC is pending signature by EPA.

**FUTURE ACTIVITIES:**

A time critical removal action is recommended for the cell building area at this time. EPA will continue to work with all responsible parties to ensure a timely and effective removal of loose mercury and contaminated structures. The AOC is pending EPA's final approval.

POLREP #1, 03/12/02

#### HISTORY

The Holtra Chem facility is a 26 acre facility wedged between the Cape Fear River and the International Paper facility. It is located in an industrial zone in Riegelwood, Columbus County, North Carolina. The Facility began operations in 1963 and ceased in October 2000. An Imminent Hazard Notice of Violation (NOV) was issued, by NCDENR after an October 2001 inspection identified regulatory violations. Significant areas of concern identified by NCDENR include:

- \*mercury cell building contains beaded mercury on the ceiling, equipment and floor.

- \*a pre CERCLA vault created in the late 1970s contains mercury waste that is reported to be lined and capped,

- \*the retort pad contains mercury contaminated metal in a bin that is covered by a tarp,

- \*two large brine tanks are partially full of crystallized caustic/alkali mercury contaminated salt and water

- \*three waste lagoons identified as the North, South and Roberts Pond(s), the north and south ponds were "closed dirty" in 1987, whereas Roberts Pond has not completed final closure

- \*two rainwater ponds, which collect rainwater runoff from the facility contain mercury contaminated water, which overtopped during Hurricane Floyd in September, 1999.

HoltraChem LLC dissolved its LLC in 2000. Two members of the LLC include Allied Signal (Honeywell Inc.) and Holtra Chem GP Inc.

Numerous OSHA violations occurred at the Facility during its operation and in December 1998, OSHA fined the facility \$873,000, the largest such fine in North Carolina history.

Storm water runoff from paved surfaces within the facility enters storm drains on the property and flow into one of two large rainwater ponds. The two ponds are

#### SITUATION

Subject site was referred from North Carolina Department of Environment and Natural Resources via letter dated January 11, 2002. The OSC performed two site visits on 1/30/2002 and 2/20/02 to determine the threat posed by conditions at the site. On both occasions the OSC met with representatives from NCDENR and Honeywell who assisted

the OSC with site information. On 2/20/02 the OSC, with assistance from START contractor, Roy F. Weston Inc., performed a Level C entry into the cell building to perform mercury vapor analysis.

#### SITE ACTIVITIES:

Site investigations revealed the following:

\*The site appeared to be well maintained by a contingent of personnel, from a subcontractor to Honeywell Inc., known as Manpower Inc. The Facility is manned seven days/week. Personnel report that they maintain levels in the two rainwater ponds so that the threat posed by a flood event would be mitigated. Treated water from these ponds is sent to neighboring International Paper for pre-treatment and discharge to the Cape Fear River, as per NPDES permit with NCDENR. Personnel also report that they ensure that the site is secure and that unauthorized personnel are denied access.

\*The Cell Building, where the chlorine was manufactured, is a closed steel construction building with concrete floors. Mercury and caustic salt was observed pooled and dripping from overhanging piping and facility structures. The mercury itself is intended to drop to the concrete floor and follow gravity drainage contours into a sump located in the basement floor. The levels in the sump are maintained by Manpower Inc. Mercury is routinely packaged and shipped offsite for recycle/disposal. It appeared that this work was being completed in compliance with the requisite ARARs.

The following levels of mercury vapors were detected during the 2/20/02 site visit: (An Hg253 mercury vapor analyzer with a measuring range of 0.001mg/m3 to 10.00mg/m3 was utilized)

Interior of cell building lower level:

- a. 10 feet south of north access door: 0.130mg/m3
- b. West side, 100 feet south of north door: 0.071mg/m3
- c. West side, 125 feet south of north door: 0.043mg/m3
- d. West end of center drainage line: 0.108mg/m3
- e. Center line, 50 ft. from sump on east wall: 0.315mg/m3
- f. Center line, 40ft. From sump on east wall: 0.341mg/m3
- g. Center line, 15ft. From sump on east wall: 0.121mg/m3
- h. Center line 15ft. From sump on eastwall near floor: 0.281mg/m3
- i. Center line 45-50ft. From sump on east wall: 0.444mg/m3
- j. Ambient air along center line: 0.100mg/m3
- k. West end of center line: 0.080mg/m3

Exterior perimeter of cell building:

- a. NW corner of building: 0.004mg/m3
- b. NW corner of building (peak reading): 0.005mg/m3
- c. West side of building near north end: 0.001mg/m3
- d. 20ft. West of building, 40ft. South of NW corner: 0.008mg/m3
- e. 35ft. West of building, 100ft. South of NW corner, near ventilation unit: 0.020mg/m3

Entrance gate to facility: background sample 0.001mg/m<sup>3</sup>

EPA Region IV has a Removal Action Level (RAL) for mercury vapors in industrial settings established at 0.025mg/m<sup>3</sup>.

Evaluation of the two rainwater collection ponds indicated that the pond levels were extremely low. The impoundments themselves appeared to be in good structural condition. A release from either of these ponds did not appear to be likely.

Hurricane Floyd, September and October, 1999 caused much havoc throughout North Carolina. A breaching/overtopping of the rainwater collection pond occurred in September, 1999. As a result of this event, NCDENR performed an evaluation of contamination at this facility in June 2001. The report by Solutions Industrial & Environmental Services Inc., dated September 20, 2001 concluded "the higher concentrations of mercury in the soils around the rainwater pond suggest that flooding associated with Hurricane Floyd may have transported mercury out of the pond and into the surface soils of the adjacent areas. Mercury was not detected in the downstream surface water sample and was detected at a very low concentration in the downstream sediment sample. This suggests that although mercury is present in the surface soils adjacent to the rainwater pond, there is no indication that it has migrated offsite."

As a result of the site visits and review of the site related investigation documents, the cell building is an obvious hot spot worthy of a time critical removal action. Airborne mercury vapor levels are well above Region IV's RAL. Although unauthorized site access is well regulated and the site itself is located in an industrial setting it is strongly recommended that this hot spot be addressed as soon as possible. It should be noted that immediately outside the cell building the airborne mercury vapor levels drop off to less than the RAL. No other specific zone or area on site was found to have airborne mercury vapors in excess of the RAL.

#### FUTURE ACTIVITIES:

A time critical removal action is recommended for the cell building area at this time. EPA will continue to work with all responsible parties to ensure a timely and effective removal of loose mercury and contaminated structures. As these discussions continue, EPA-ERRB will initiate an investigation into other potential hot spots on site. These areas could include surface soil and sediment sampling of the down gradient soils below the rain water ponds and creek. A sampling investigation of the "retort" pad, and waste lagoons identified as the North Pond, the South Pond and Roberts Pond is a possibility as part of an integrated sampling event with NCDENR's superfund program.